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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,579

03/22/2004

Akiko Suzuki

KPO193

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25271

7590

02/02/2006

GALLAGHER & LATHROP, A PROFESSIONAL CORPORATION
601 CALIFORNIA ST
SUITE 1111
SAN FRANCISCO, CA 94108

EXAMINER

KIANNI, KAVEH C

ART UNIT

PAPER NUMBER

2883

DATE MAILED: 02/02/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/806,579

Applicant(s)

SUZUKI, AKIKO

Examiner

Kianni C. Kaveh

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 8-13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☒ Claim(s) 4-7 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Applicant's canceling of claims 14-15 in the amendment submitted on 11/16/05 is acknowledged.

Applicant's election with traverse of claims in response/amendment submitted on is acknowledged. Grounds for such traversal alleged to be that the Group inventions IA and IB are not mutually exclusive without providing reasoning and claimed limitation comparisons. This is not found persuasive since group invention IA is directed to including said optical element chip has said optical element formed on a protruding end face of a convexity protrusively provided on one side of a chip body; a groove is formed as an element mounting portion in a mounting surface of said platform on which said optical part is to be mounted; while Group invention IB, Claims 8-13 directed to including said optical element chip has said optical element formed on the bottom of a concavity in one side of a chip body; a convexity is formed as an element mounting portion on a mounting surface of said platform on which said optical part is to be mounted. Thus, each of the above group inventions directed to an invention that is distinct, and requires a different search, than that of other inventions and the requirement is still deemed proper and is therefore made FINAL.

Allowable Subject Matter

Claims 4-7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 4-7 are allowable because the prior art of record, taken alone or in combination, fails to disclose or render obvious wherein: the position of said optical element with respect to said mounting surface is a position which is determined by surface-to-

Art Unit: 2883

surface contact between a pair of opposed side surfaces of said convexity and a pair of opposed wall surfaces of said element mounting portion and where said optical element is parallel to said mounting surface in the direction of arrangement of said side surfaces and said wall surfaces in combination with the rest of the limitations of the base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim rejected under 35 U.S.C. 103(a) as being unpatentable over combination of Hirataka et al. (US 5675684) and Tabuchi et al. (JP409005586A).

Regarding claim 1, Hirataka teaches an optical element assembly in which an optical part is mounted on a platform for optical coupling to an optical element of an optical element chip mounted on said platform 95/93/3 (shown in at least fig. 9D and 4B and see abstract; wherein the optical element is shown in the middle of the chip 11/94 aligned with optical part 9/91 for optical coupling with the chip), wherein:

said optical element chip 94 has said optical element (shown in the middle of the chip 94) formed on a protruding end face and protrusively provided on one side of a chip body (shown in at least fig. 9d and 6, item chip 94 or 1); a groove 10 is formed as an element mounting portion in a mounting surface of said platform 95 on which said optical part 9/91 is to be mounted;

said optical element chip 11/94 is mounted on said mounting surface with said optical element chip 11/94 fitted in said element mounting portion so that said optical element is positioned with respect to said mounting surface (shown in at least fig. 4b and 9D, item optical element in the middle portion of the chip positioned with respect to mounting surface);

and said optical part 9/91 is positioned with respect to said mounting surface and mounted thereon, and a part receiving recess 92 is formed in said mounting surface of said platform 3/95 to establish optical coupling between said optical part 91 and said optical element.

However, Hirataka does not specifically teach wherein the above chip having protruding portion to have a shaped of convexity. This, convexity of the chip in which there is an optical coupling between the optical element of the chip and optical part is

Art Unit: 2883

taught by Tabuchi (see at least fig. 12B, item chip 11 with protruding convexity and optical element/waveguide core/active element 14 aligned). Thus, Tabuchi provides improved accuracy of alignment (see abstract). Thus, it would have been obvious to an artisan of ordinary skill in the art when the invention was made to reshape Hiraka's chip with its protruding portion be similar to that of Tabuchi's since such reshaping would provide self-alignment of chip with respect to optical parts with high accuracy (see col. 2, 1st parag.).

Regarding claims 2-3, as stated in rejection of claim 1, above, Hirataka further teaches wherein: the position of said optical element with respect to said mounting surface is a position where said optical element is parallel to said mounting surface at a predetermined depth from said mounting surface in one direction parallel to said mounting surface; and the position of said optical part with respect to said mounting surface is a position where the optical axis of said optical part is parallel to said mounting surface at said predetermined depth in said one direction parallel to said mounting surface (shown in at least fig. 4, item chip 11 having optical element in parallel with respect to mounting surface and also optical part/waveguide axis); wherein a light inlet/outlet port of said optical element and the optical axis of said optical part are aligned with each other (shown in at least fig. 4, item chip 11 having optical element in aligned with optical part/waveguide axis).

Citation of Relevant Prior Art

Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In accordance with MPEP 707.05 the following references are pertinent in rejection of this application since they provide substantially the same information disclosure as this patent does. These references are:

Delprat et al. 20010055447

Ogawa et al. 20050207695

Yoshimura et al. 20020097962

Blauvelt et al. (US 20040218870)

Lam et al. 20040017877

Moretti 20030210873

These references are cited herein to show the relevance of the apparatus/methods taught within these references as prior art.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Cyrus Kianni whose telephone number is (571) 272-2417.

The examiner can normally be reached on Monday through Friday from 8:30 a.m. to 6:00 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font, can be reached at (571) 272-2415.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9306 (for formal communications intended for entry)

Art Unit: 2883

or:

Hand delivered responses should be brought to Crystal Plaza 4, 2021 South Clark Place, Arlington, VA., Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Group Receptionist whose telephone number is (703) 308-0956.

K. Cyrus Kianni
Primary Patent Examiner
Group Art Unit 2883

January 26, 2006

**KAVEH KIANNI
PRIMARY EXAMINER**

**KAVEH KIANNI
PRIMARY EXAMINER**

A handwritten signature in black ink, appearing to be 'K. Kianni', followed by a long horizontal line extending to the right.
